1 JAMES C. OTTESON, State Bar No. 157781 jim@agilityiplaw.com 2 MICHELLE G. BREIT, State Bar No. 133143 E-FILING mbreit@agilityiplaw.com 3 AGILITY IP LAW, LLP 149 Commonwealth Drive ADR 4 Menlo Park, CA 94025 Telephone: (650) 227-4800 5 Facsimile: (650) 318-3483 FILED 6 Attorneys for Plaintiffs TECHNOLOGY PROPERTIES LIMITED LLC JUL 24 2017 7 and PHOENIX DIGITAL SOLUTIONS LLC PICHERY W. W. CHYG OLERK, U.S. DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA 8 CHARLES T. HOGE, State Bar No. 110696 choge@knlh.com Kirby Noonan Lance & Hoge LLP 350 Tenth Avenue, Suite 1300 10 San Diego, CA 92101 Telephone: (619) 231-8666 11 Attorneys for Plaintiff 12 PATRIOT SCIENTIFIC CORPORATION 13 UNITED STATES DISTRICT COURT 14 NORTHERN DISTRICT OF CALIFORNIA 12-03880 15 TECHNOLOGY PROPERTIES LIMITED LLC, PHOENIX DIGITAL SOLUTIONS 16 LLC, and PATRIOT SCIENTIFIC COMPLAINT FOR PATENT CORPORATION, INFRINGEMENT 17 Plaintiffs. **DEMAND FOR JURY TRIAL** 18 VS. 19 LG ELECTRONICS, INC. and LG 20 ELECTRONICS U.S.A., INC., 21 Defendants. 22 23 Technology Properties Limited LLC ("TPL"), Phoenix Digital Solutions LLC ("PDS") 24 and Patriot Scientific Corporation ("PTSC") (collectively "Plaintiffs") hereby allege for their 25 Complaint for Patent Infringement ("Complaint") against Defendants LG Electronics and LG 26 Electronics U.S.A., Inc. (collectively "Defendants") on personal knowledge as to their own 27 actions and on information and belief as to the actions of Defendants, as follows:

COMPLAINT FOR PATENT INFRINGEMENT

PARTIES

- Plaintiff Technology Properties Limited LLC is a California limited liability company with its principal place of business at 20883 Stevens Creek Blvd., Suite 100, Cupertino, California 95014.
- 2. Plaintiff Phoenix Digital Solutions LLC is a Delaware limited liability company with its principal place of business at 20883 Stevens Creek Blvd., Suite 100, Cupertino, California 95014.
- 3. Plaintiff Patriot Scientific Corporation is a Delaware limited liability company with its principal place of business at 701 Palomar Airport Road, Suite 170, Carlsbad, California 92011.
- 4. On information and belief, Defendant LG Electronics is a Korean corporation with a principal place of business at LG Twin Towers, 20 Yeouido-dong, Yeongdeungpo-gu, Seoul 150-721, Republic of Korea.
- 5. On information and belief, Defendant LG Electronics U.S.A., Inc., is a Delaware corporation with a principal place of business at 1000 Sylvan Avenue, Englewood Cliffs, New Jersey 08632.

JURISDICTION, VENUE AND INTRADISTRICT ASSIGNMENT

- 6. This is an action for damages and injunctive relief based on patent infringement arising under the patent laws of the United States, Title 35 of the United States Code.
- 7. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. § 1331 and 28 U.S.C. § 1338.
- 8. On information and belief, Defendants have transacted business in this District, contracted to supply goods or services in this District directly or through their agents, have offered for sale, sold and/or advertised their products and services in the this District, and have otherwise purposely availed themselves of the privileges and benefits of the laws of the State of California. This Court has jurisdiction over Defendants because Defendants have committed acts of patent infringement during the course of their business in this District.

- 9. Venue is proper in this District pursuant to 28 U.S.C. § 1400(a) and (b) and 28 U.S.C. § 1391.
- 10. This matter is an intellectual property action and is not subject to intradistrict assignment under Civil L.R. 3-2(c).

THE ASSERTED PATENTS

The '749 Patent

- 11. United States Patent No. 5,440,749 ("the '749 Patent), entitled "High Performance, Low Cost Microprocessor Architecture," issued on August 8, 1995 to Charles H. Moore and Russell H. Fish, III. A true and correct copy of the '749 Patent is attached as Exhibit A to this Complaint.
- 12. The '749 Patent teaches a processor that fetches multiple instructions at a time, and then supplies them to the CPU's instruction register in parallel during the same memory cycle they are fetched. Since memory is generally slower than the CPU, being able to fetch and supply more than one instruction at a time increases the number of instructions the CPU can receive in a given time, and thus increases instruction bandwidth.
- 13. Plaintiffs TPL, PDS and PTSC collectively hold all substantial rights to the '749 Patent.

The '890 Patent

- 14. United States Patent No. 5,530,890 ("the '890 Patent"), entitled "High Performance, Low Cost Microprocessor," issued on June 25, 1996 to Charles H. Moore and Russell H. Fish, III. A true and correct copy of the '890 Patent is attached as Exhibit B to this Complaint.
- 15. The '890 Patent teaches a dual stack architecture and the use of stack pointers that can reference memory in any location to provide more architectural flexibility and faster access to data elements. A stack architecture is sometimes analogized to a spring-loaded stack of plates of the kind used in a restaurant. The last plate placed (or "pushed") on the top of the stack is the first plate removed (or "popped") off the stack when needed. Like plates, data elements can be

"pushed" onto or "popped" off the stack. However, by using a "stack pointer," the CPU does not need to be an actual top-to-bottom "spring-loaded" stack. Instead, the stack pointer keeps track of where the "top of stack" item is in a "virtual stack," so it can be accessed directly as if it were on the "top." Combining this with other features, such as a memory controller and direct memory access, the '890 Patent allows the CPU to off-load memory transfer of data to achieve further efficiencies and higher performance.

16. Plaintiffs TPL, PDS and PTSC collectively hold all substantial rights to the '890 Patent.

The '336 Patent

- 17. United States Patent No. 5,809,336 ("the '336 Patent"), entitled "High Performance Microprocessor Having Variable Speed System Clock," was duly and legally issued on September 15, 1998 to Charles H. Moore and Russell H. Fish, III. A true and correct copy of the '336 Patent is attached as Exhibit C to this Complaint.
- 18. The '336 Patent teaches the use of two independent clocks in a microprocessor system: (1) an on-chip clock to time the CPU; and (2) a second independent clock to time the input/output (I/O) interface. This innovation was widely adopted by the industry and became fundamental to the increased speed and efficiency of modern microprocessors. Decoupling the system clock from the I/O clock allows the clocks to run independently (or "asynchronously").
- 19. Plaintiffs TPL, PDS and PTSC collectively hold all substantial rights to the '336 Patent.

COUNT I

INFRINGEMENT OF THE '749 PATENT

- 20. Plaintiffs reallege and incorporate herein by reference the allegations contained in paragraphs 1-19.
- 21. On information and belief, without a license or permission from Plaintiffs, Defendants have infringed and continue to infringe at least claim 1 of the '749 Patent. Defendants' infringing activities in the United States and in this District include importing,

making, using, offering to sell, and/or selling products and devices that embody and/or practice the patented invention, including but not limited to Lucid 4G LTE.

- 22. On information and belief, Defendants' direct infringement of the '749 Patent has caused and continues to cause substantial damage to Plaintiffs.
- 23. On information and belief, Defendants' direct infringement of the '749 Patent has been and continues to be willful and deliberate, entitling Plaintiffs to enhanced damages and attorneys' fees.

COUNT II

INFRINGEMENT OF THE '890 PATENT

- 24. Plaintiffs reallege and incorporate herein by reference the allegations contained in paragraphs 1-23.
- 25. On information and belief, without a license or permission from Plaintiffs,
 Defendants have infringed and continue to infringe at least claim 7 of the '890 Patent.
 Defendants' infringing activities in the United States and in this District include importing,
 making, using, offering to sell, and/or selling products and devices that embody and/or practice
 the patented invention, including but not limited to the Lucid 4G LTE.
- 26. On information and belief, Defendants' direct infringement of the '890 Patent has caused and continues to cause substantial damage to Plaintiffs.
- 27. On information and belief, Defendants' direct infringement of the '890 Patent has been and continues to be willful and deliberate, entitling Plaintiffs to enhanced damages and attorneys' fees.

COUNT III

INFRINGEMENT OF THE '336 PATENT

- 28. Plaintiffs reallege and incorporate herein by reference the allegations contained in paragraphs 1-27.
- 29. On information and belief, without a license or permission from Plaintiffs,
 Defendants have infringed and continue to infringe, induced others to infringe and continue to

methods.

induce others to infringe, and/or has committed and continue to commit acts of contributory infringement, literally or under the doctrine of equivalents, at least claim 1 of the '336 Patent. Defendants' infringing activities in the United States and in this District include importing, making, using, offering to sell, and/or selling products and devices that embody and/or practice the patented invention, including but not limited to the Lucid 4G LTE, and contributing to, and inducing consumers and users to make and use the patented invention and to practice the claimed

- 30. On information and belief, Defendants induce others to infringe at least claim 1 of the '336 Patent by encouraging and facilitating others to perform actions known by Defendants to infringe and with the intent that performance of the actions will infringe. TPL provided LG notice of the '336 Patent by letter (with an enclosed disk identifying the MMP patents) dated October 3, 2005.
- 31. On information and belief, Defendants induce consumers to make and use the claimed inventions and to practice the claimed methods by (i) providing the LG LUCID 4G LTE with a USB input/output interface for connecting the accused devices to a peripheral device, the peripheral device having a clock independent of the CPU clock (e.g., ring oscillator) connected to the central processing unit on the microprocessors of the LG LUCID 4G LTE, and (ii) instructing consumers to connect the accused products to a peripheral device such that the combination includes each element of the asserted apparatus claims of the '336 Patent and use of the combination, as intended, practices each of the elements of at least claim 1 of the '336 Patent.
- 32. On information and belief, consumers make and use the claimed inventions and practice the claimed methods by using the LG LUCID 4G LTE in combination with a peripheral device having a clock that originates clock signals from a source other than the clock connected to the central processing unit on the microprocessors of the LG accused product, thereby directly infringing at least claim 1 of the '336 Patent.

- 33. On information and belief, Defendants' direct, induced and/or contributory infringement of the '336 Patent has caused and continues to cause substantial damage to Plaintiffs.
- 34. On information and belief, Defendants' direct, induced and/or contributory infringement of the '336 Patent has been and continues to be willful, entitling Plaintiffs to enhanced damages and attorneys' fees.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs Technology Properties Limited, Phoenix Digital Solutions LLC, and Patriot Scientific Corporation pray for judgment and relief as follows:

- A. A judgment that Defendants have infringed one or more claims of the Asserted Patents;
- B. An award of damages in an amount adequate to compensate Plaintiffs for Defendants' infringement of the Asserted Patents;
- C. A declaration that Defendants' infringement of the Asserted Patents was willful and that this case is exceptional pursuant to 35 U.S.C. § 285.
- D. An award of Plaintiffs' costs, expenses and attorneys' fees incurred in bringing and prosecuting this action;
- E. An award of enhanced damages resulting from Defendants' willful infringement, and all other categories of damages allowed by 35 U.S.C. § 284.
 - F. An award of pre-judgment interest; and
 - G. Such other and further relief as this Court may deem just and appropriate.

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DEMAND FOR JURY TRIAL

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiffs demand a jury trial as to all issues so triable.

Dated: July 24, 2012

Respectfully submitted,

AGILITY IP LAW LLP

James C. Otteson

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and PHOENIX DIGITAL SOLUTIONS LLC

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